UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,885	10/31/2003	Debargha Mukherjee	100201426-1	2006

22879   7590   09/13/2007

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER
ANYIKIRE, CHIKAODILI E

ART UNIT	PAPER NUMBER
2621	

MAIL DATE	DELIVERY MODE
09/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/698,885	MUKHERJEE, DEBARGHA
	Examiner	Art Unit	
	Chikaodili E. Anyikire	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>20031031</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

1. This application is responsive to application number (10698885) filed on October 31, 2003. Claims 1-37 are pending and have been examined.

Information Disclosure Statement

2. Acknowledgement is made of applicant's information disclosure statement.

Claim Objections

3. Claims 1-9 are objected to because of the following informalities: Claim 1 Ln 11 and 14, "an other" should be corrected to "another". Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 24-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The article of manufacture of claims 24-27 do not comply with the requirements of MPEP 2106.01.I.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6.   Claims 1-8, 10-17, 20-35, and 37 rejected under 35 U.S.C. 102(e) as being

anticipated by Guedalia (US 6,536,043).

As per claim 1, Guedalia discloses a data communications method comprising:

providing configuration parameters regarding capabilities associated with a

receiving device and usable to implement scaling of media data to be received (Fig 5,

78; Col 21 Ln 64-Col 22 Ln 7 and Col 30 Ln 34-48);

receiving media data scaled according to the configuration parameters and

comprising a plurality of frames for generating a plurality of respective images (Fig 5,

78; Col 21 Ln 64-Col 22 Ln 7 and Col 30 Ln 34-48);

initially decoding compressed media data for an initial one of the frames and less

than all of the frames (Col 3 Ln 25-35 and Col 23 Ln 50-57);

initially displaying at least one visual image using the initially decoded media data

(Col 3 Ln 25-35 and Col 23 Ln 50-57);

randomly selecting another of the frames after the displaying (Fig 6, 79; Col 21

Ln 47-63 and Col 30 Ln 48-59);

subsequently decoding compressed media data of the other of the frames after

the initially decoding and the initially displaying (Fig 2, 36; Col 27 Ln 46-67); and

subsequently displaying another visual image using the subsequently decoded

media data (Fig 2, 36; Col 27 Ln 46-67).

As per claim 2, Guedalia disclose The method of claim 1 wherein the initially decoding comprises decoding frames of a first type (Fig 2, 36; Col 3 Ln 25-35, Col 21 Ln 5-18 and Col 23 Ln 50-57) and the subsequently decoding comprises decoding frames of a second type different than the first type, and wherein the first type of frames comprise data usable to decode the second type of frames (Fig 2, 36; Col 21 Ln 5-18 and Col 27 Ln 46-67).

As per claim 3, Guedalia discloses the method of claim 1 wherein the media data comprises data for a plurality of multiple sequences of visual images synchronized with one another (Figs 3A and 3B; Col 21 Ln 5-18 and Col 28 Ln 10-43).

As per claim 4, Guedalia disclose the method of claim 1 further comprising accessing a user input entered responsive to user navigation of the at least one visual image (Col 23 Ln 50- Col 24 Ln 13), and wherein the randomly selecting comprises selecting the other of the frames responsive to the user input (Fig 6, 79; Col 21 Ln 47-63 and Col 30 Ln 48-59).

As per claim 5, Guedalia discloses the method of claim 1 wherein the compressed media data comprises data for a sequence of a plurality of images (Figs 3A and 3B; Col 21 Ln 5-18 and Col 28 Ln 10-43), and the randomly selecting comprises selecting the other of the frames out of sequence (Fig 6, 79; Col 21 Ln 47-63 and Col 30 Ln 48-59).

As per claim 6, Guedalia discloses the method of claim 1 wherein the subsequently decoding (Fig 2, 36) comprises decoding compressed media data of no more than one frame to display the other visual image (Fig 2, 36; Col 21 Ln 5-18).

As per claim 7, Guedalia discloses the method of claim 1 further comprising:

accessing the configuration parameters within a sending device (Fig 5, 78; Col 21 Ln 64-Col 22 Ln 7 and Col 30 Ln 34-48); and

scaling the compressed media data according to the configuration parameters to provide data steams of the compressed media data comprising different amounts of data for a given subject (Fig 5, 78; Col 21 Ln 64-Col 22 Ln 7 and Col 30 Ln 34-48).

As per claim 8, Guedalia discloses the method of claim 7 wherein the scaling comprises scaling according to at least one of temporal, spatial, signal-to-noise ratio, and interactivity scaling attributes (Col 21 Ln 5-18).

As per claim 10, Guedalia discloses a compressed media data decoding method comprising:

accessing compressed media data of a plurality of frames corresponding to a sequence of images, wherein the frames correspond to a plurality of respective images of the sequence (Figs 3A and 3B; Col 21 Ln 5-18, Col 27 Ln 46-67 and Col 28 Ln 10-43);

accessing a plurality of data requests for selected ones of the images (Col 27 Ln 46-67);

selecting respective ones of the frames of the media data responsive to the data requests (Fig 6, 79; Col 21 Ln 47-63, Col 27 Ln 46-67 and Col 30 Ln 48-59); and

decoding compressed image data of the selected ones of the frames, wherein the decoding comprises decoding at least some of the frames out of sequence responsive to the selecting (Fig 2, 36; Col 27 Ln 46-67).

As per claim 11, Guedalia discloses the method of claim 10 further comprising receiving the frames in a linear order corresponding to the sequence of the images (Figs 3A and 3B; Col 21 Ln 5-18 and Col 28 Ln 10-43).

As per claim 12, Guedalia discloses the method of claim 10 wherein the accessing the compressed media data comprises receiving the compressed media data within a recipient communications device (Col 27 Ln 46-Col 28 Ln 3), and further comprising providing configuration parameters corresponding to capabilities of the recipient communications device, and the receiving comprises receiving the compressed media data scaled according to the configuration parameters (Fig 5, 78; Col 21 Ln 64-Col 22 Ln 7 and Col 30 Ln 34-48).

As per claim 13, Guedalia discloses the method of claim 10 further comprising: decoding compressed media data of a plurality of a first type of frames, and wherein the data requests correspond to images generated using media data of the first type of frames, and wherein the decoding the selected ones of the frames comprises decoding a second type of frames different than the first type of frames (Fig 2, 36; Col 21 Ln 5-18 and Col 27 Ln 46-67).

As per claim 14, Guedalia discloses the method of claim 13 wherein the data requests correspond to user inputs of a user navigating the images generated using the media data of the first type of frames (Col 23 Ln 50- Col 24 Ln 13).

As per claim 15, Guedalia discloses a compressed media data decoder comprising:

an interface configured to access compressed media data comprising a plurality

of frames usable to generate a plurality of respective images, wherein the frames

comprise a plurality of frame types (Figs 3A and 3B; Col 21 Ln 5-18, Col 27 Ln 46-67

and Col 28 Ln 10-43); and

processing circuitry coupled with the interface and configured to initially decode a

first type of the frames at an initial moment in time to initiate viewing of at least one of

the images (Col 3 Ln 25-35 and Col 23 Ln 50-57), to control a display to depict the at

least one image, to access a data request for depiction of another one of the images

after the depiction of the at least one image (Col 27 Ln 46-67), and to decode the

compressed media data of another frame comprising a second type of frame using the

initially decoded media data of the frame corresponding to the at least one image (Fig 2,

36; Col 21 Ln 5-18 and Col 27 Ln 46-67).

As per claim 16, Guedalia discloses the decoder of claim 15 wherein the data

requests are generated responsive to user interaction with the at least one image (Col

23 Ln 50- Col 24 Ln 13 and Col 27 Ln 46-67), and the processing circuitry is configured

to initially decode the first type of frames without user input (Col 3 Ln 25-35 and Col 23

Ln 50-57).

As per claim 17, Guedalia discloses the decoder of claim 15 wherein the

compressed media data comprises data for a sequence of a plurality of images

comprising a linear order (Figs 3A and 3B; Col 21 Ln 5-18, Col 27 Ln 46-67 and Col 28

Ln 10-43), and the processing circuitry is configured to decode the compressed media

data of the another frame out of sequence and responsive to user input (Fig 2, 36; Col

21 Ln 5-18, Col 23 Ln 50-Col 24 Ln 13, Col 27 Ln 46-67, and Col 30 Ln 45-57).

As per claim 20, Guedalia discloses the decoder of claim 15 wherein the

processing circuitry is configured to control the display of at least one image prior to

decoding of all of the accessed compressed media data (Fig 2, 36; Col 3 Ln 25-35 and

Col 23 Ln 50-57).

As per claim 21, Guedalia discloses the decoder of claim 15 wherein the

processing circuitry is further configured to provide configuration parameters

corresponding to capabilities of a recipient communications device associated with the

compressed media data decoder, and wherein the compressed media data comprises .

data scaled according to the configuration parameters (Fig 5, 78; Col 21 Ln 5-18, Col 21

Ln 64-Col 22 Ln 7 and Col 30 Ln 34-48).

As per claim 22, Guedalia discloses the decoder of claim 21 wherein the

processing circuitry is configured to decode the scaled data (Fig 2, 36; Col 27 Ln 46-

67).

As per claim 23, Guedalia discloses the decoder (Fig 2, 36) of claim 15 wherein

the processing circuitry is configured to decode no more than a single one of the second

type of frames to depict the another one of the images (Col 21 Ln 5-18).

As per claim 24, Guedalia discloses an article of manufacture comprising:

processor-usable media comprising programming configured to cause

processing circuitry to:

access compressed media data of a plurality of frames for a plurality of images of

a sequence (Figs 3A and 3B; Col 21 Ln 5-18, Col 27 Ln 46-67 and Col 28 Ln 10-43);

access a plurality of data requests with respect to the compressed media data

(Fig 6, 79; Col 21 Ln 47-63, Col 27 Ln 46-67 and Col 30 Ln 48-59);

select at least some of the frames for decoding responsive to the data requests

(Fig 6, 79; Col 21 Ln 47-63, Col 27 Ln 46-67 and Col 30 Ln 48-59);

decode the compressed media data of the selected frames, wherein the selecting

and decoding comprise selecting and decoding the compressed media data of the

frames out of sequence; implement generation of respective images using the decoded

media data (Fig 2, 36; Col 27 Ln 46-67).

As per claim 25, Guedalia discloses the article of claim 24 wherein the

compressed media data comprises data of the frames arranged in a linear order

corresponding to the sequence of the images (Figs 3A and 3B; Col 21 Ln 5-18, Col 27

Ln 46-67 and Col 28 Ln 10-43).

As per claim 26, Guedalia discloses the article of claim 24 wherein the decoding

comprises decoding the compressed media data of the selected ones of the frames in

real time during user navigation of at least one of the images (Col 26 Ln 14-27 and Col

28 Ln 66- Col 29 Ln 12).

As per claim 27, Guedalia discloses the article of claim 24 wherein the

programming is configured to cause processing circuitry to initiate decoding of at least

some of the compressed media data without user input, and the data requests are

generated responsive to user navigation of an image generated using media data

decoded without the user input (Fig 2, 36; Col 3 Ln 25-35, Col 23 Ln 50-57, and Col 27

Ln 46-67).

As per claim 28, Guedalia discloses a data communications system comprising:

transmitting means for accessing media data of a plurality of frames for a

sequence of visual images of at least one subject, for encoding the media data using a

compression scheme providing compressed media data comprising a plurality of

different frame types, and for outputting the compressed media data after the encoding;

and

receiving means coupled with the transmitting means and comprising means for

receiving the compressed media data after the outputting,

wherein the receiving means further comprises means for initiating decoding of

the compressed media data of a first type of the frames less than all the frames to

initiate viewing of one of the images of the subject (Fig 5, 78; Col 21 Ln 64-Col 22 Ln 7

and Col 30 Ln 34-48), for accessing a plurality of data requests for images comprising

compressed media data of a second type of the frames (Fig 6, 79; Col 21 Ln 47-63, Col

27 Ln 46-67 and Col 30 Ln 48-59), and for decoding the compressed media data of

respective requested ones of the second type of the frames responsive to the data

requests (Fig 2, 36; Col 27 Ln 46-67).

As per claim 29, Guedalia discloses the system of claim 28 wherein the

transmitting means comprises means for transmitting the first type of frames at an initial

moment in time (Col 3 Ln 25-35 and Col 23 Ln 50-57) and for transmitting the second

type of frames at a subsequent moment in time responsive to the data requests from the receiving means (Fig 2, 36; Col 27 Ln 46-67).

As per claim 30, Guedalia discloses the system of claim 28 further comprising providing configuration parameters corresponding to capabilities of the receiving means, and the receiving comprises receiving the compressed media data scaled according to the configuration parameters (Fig 5; Col 21 Ln 64- Col 22 Ln 7 and Col 30 Ln 48-59).

As per claim 31, Guedalia discloses the system of claim 28 wherein the receiving means comprises means for communicating respective configuration parameters to the transmitting means, and the transmitting means comprises means for scaling the compressed media data according to the configuration parameters (Fig 5; Col 21 Ln 64- Col 22 Ln 7 and Col 30 Ln 48-59).

As per claim 32, Guedalia discloses the system of claim 28 wherein the receiving means comprises means for initiating the decoding without requests for the media data of the first type of frames (Col 3 Ln 25-35 and Col 23 Ln 50-57).

As per claim 33, Guedalia discloses the system of claim 28 wherein the receiving means comprises means for depicting at least one visual image using media data of the initially decoded first type of frames prior to decoding of an entirety of the compressed media data (Col 3 Ln 25-35 and Col 23 Ln 50-57).

As per claim 34, Guedalia discloses the system of claim 28 wherein the receiving means comprises means for decoding the compressed media data of the second type of frames using initially decoded media data of the first type of frames (Fig 2, 36; Col 21 Ln 5-18 and Col 27 Ln 46-67).

As per claim 35, Guedalia discloses the system of claim 28 wherein the receiving means comprises means for decoding the compressed media data of the second type of frames responsive to user interaction with decoded media data of the first type of frames (Fig 2, 36; Col 21 Ln 5-18 and Col 27 Ln 46-67).

As per claim 37, Guedalia discloses the system of claim 28 wherein the receiving means comprises means for decoding the second type of the frames out of sequence (Fig 2, 36; Col 27 Ln 46-67).

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8.   The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

9.   Claim 9, 18-19, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guedalia (US 6,536,043).

As per claim 9, Guedalia discloses the method of claim 1.

However, Guedalia does not explicitly teach wherein the frames individually comprise temporal, spatial, signal-to-noise ratio, and interactivity levels of scalability.

However, the examiner takes official notice that temporal, spatial, signal-to-noise ratio, and interactivity levels of scalability are standard processes in video compression and image enhancement. It would have been obvious to incorporate these levels of scalability for individual frames because it is a conventional procedure routinely implemented in the art.

As per claim 18, Guedalia discloses the decoder of claim 15.

However, Guedalia does not explicitly teach wherein the processing circuitry is configured to decode an entirety of the compressed media data of the first type of frames prior to decoding the compressed media data of the second type of frames.

However, the examiner takes official notice that configuring the processing circuitry to decode an entirety of the compressed media data of the first type of frames prior to decoding the compressed media data of the second type of frames is conventional in MPEG standard to fully decode anchor frames prior to decoding B-frames. This procedure is routinely implemented in MPEG compression.

As per claim 19, Guedalia discloses the decoder of claim 18 wherein the first type of frames comprise anchor frames (Col 21 Ln 5-18).

As per claim 36, Guedalia discloses the system of claim 28.

However, Guedalia does not explicitly teach wherein the receiving means comprises means for decoding all of the first type of frames comprising anchor frames before the receiving the data requests, and for depicting an image responsive to the

decoding the second type of frames comprising B frames, and for decoding no more than a single one of the B frames to depict the image.

However, examiner takes official notice that the receiving means comprises means for decoding all of the first type of frames comprising anchor frames before the receiving the data requests, and for depicting an image responsive to the decoding the second type of frames comprising B frames, and for decoding no more than a single one of the B frames to depict the image is conventional in MPEG standard to fully decode anchor frames prior to decoding B-frames. This procedure is routinely implemented in MPEG compression.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chikaodili E. Anyikire whose telephone number is (571) 270-1445. The examiner can normally be reached on Monday to Friday, 7:30 am to 5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272 - 7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CEA   *Mehrdad Dastouri*
                                        MEHRDAD DASTOURI
                                        SUPERVISORY PATENT EXAMINER
                                                TC 2600